

HEIRLOOM
center for art and archives

TRACER OBJECT
Anne Haaning

February 28 – May 31, 2025

Anne Haaning's solo exhibition *TRACER OBJECT* is based on the American space agency NASA's archive of stardust collected from the *Stardust* mission between 1999 and 2006. Haaning is interested in what significance images can hold as containers and who they communicate to. HEIRLOOM has invited her to exhibit her ongoing artistic research project in NASA's stardust archive and show her exploration of what traces are deposited in the spaces, materials, and stories that surround us.

The exhibition's title, *TRACER OBJECT*, is the name of a tool in the digital 3D rendering program that the artist uses in her attempt to challenge the abstract scientific narratives about the universe. The exhibition presents a series of large prints on silk with motifs from NASA's stardust archive, as well as the vacuum frame and exposure machine the artist has created to produce the silk works. Here, Haaning has used the old photographic technique of cyanotype, where the image is a trace of the light exposure the motif undergoes.

Additionally, the new video work *SPECKS* is installed in sand dunes in HEIRLOOM's cinema. In the video installation, Haaning explores and speculates on the digital reality we live in, and the quantum leap that occurs between her own body lying at the water's edge on the island of Møn and NASA's mission in outer space. The artistic process is exposed in the work itself, including the artist's prompt to the AI chatbot which has been tasked with composing the work's soundtrack *Stardust Echoes*.

The stardust, whose microscopic size makes it invisible to the human eye, has been made visible at NASA's laboratory in Houston, USA, through advanced technological methods and equipment that have condensed the dust to a sign – a trace of its original existence out in space. The traces of the cosmic dust, and the technological inventions surrounding their discovery and reproduction, shape Haaning's project of deconstructing NASA's archive of stardust. Visitors will have the opportunity to follow her exploration of the intangible scientific material

and experience the striking dialogue between the science laboratory and the artist's workspace.

In an accelerated reality where artificial intelligence is gaining ground day by day, where social media has changed the media landscape in just a few years and where sci-fi future scenarios suddenly collide with the present, the artistic endeavour to evoke technological constructions creates an important anchor point. Haaning's attempt to navigate this maze of signs, data, translation and meaning-making simultaneously becomes an image of how many invisible and unconscious filters and prisms we experience the world through.

Ground floor:

1 Tracer Object (2025)

Pinewood, acrylic plate, rubber membrane, vacuum connector, foam sail, BAUHAUS sawhorses, 250 x 125 x 180 cm (in open state).

2 T191 series 2 (2025)

T191 series 1 (2025)

T191 series 3 (2025)

T35 series 2 (2025)

T35 series 3 (2025)

Cyanotype on silk, 280 x 114 cm

Pile:

T35 series 1 (2025)

T5 series 1 (2025)

T5 series 2 (2025)

T5 series 3 (2025)

T80 series 1 (2025)

T80 series 2 (2025)

T80 series 3 (2025)

T32/69 series 1 (2025)

T32/69 series 2 (2025)

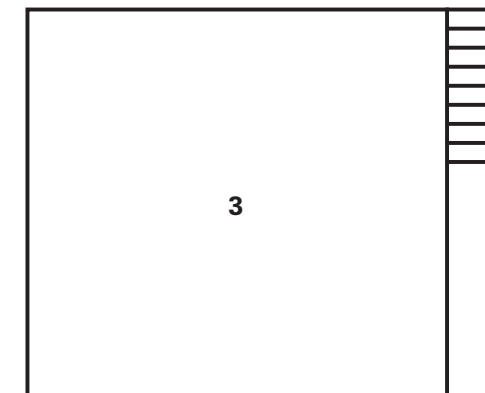
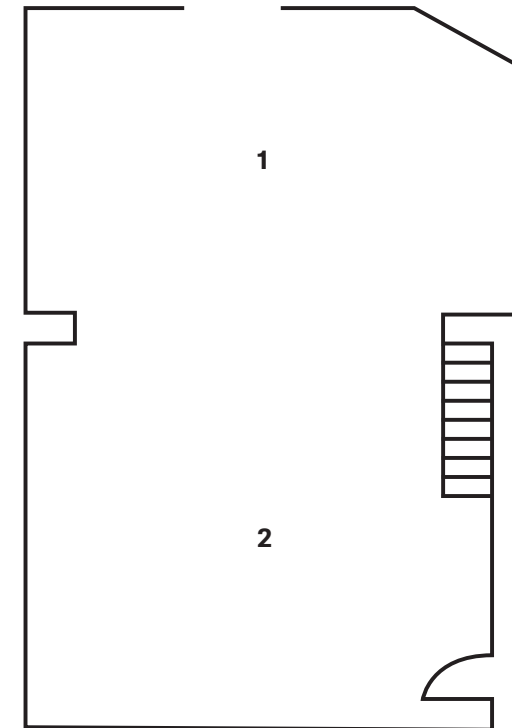
Cyanotype on silk, 280 x 114 cm

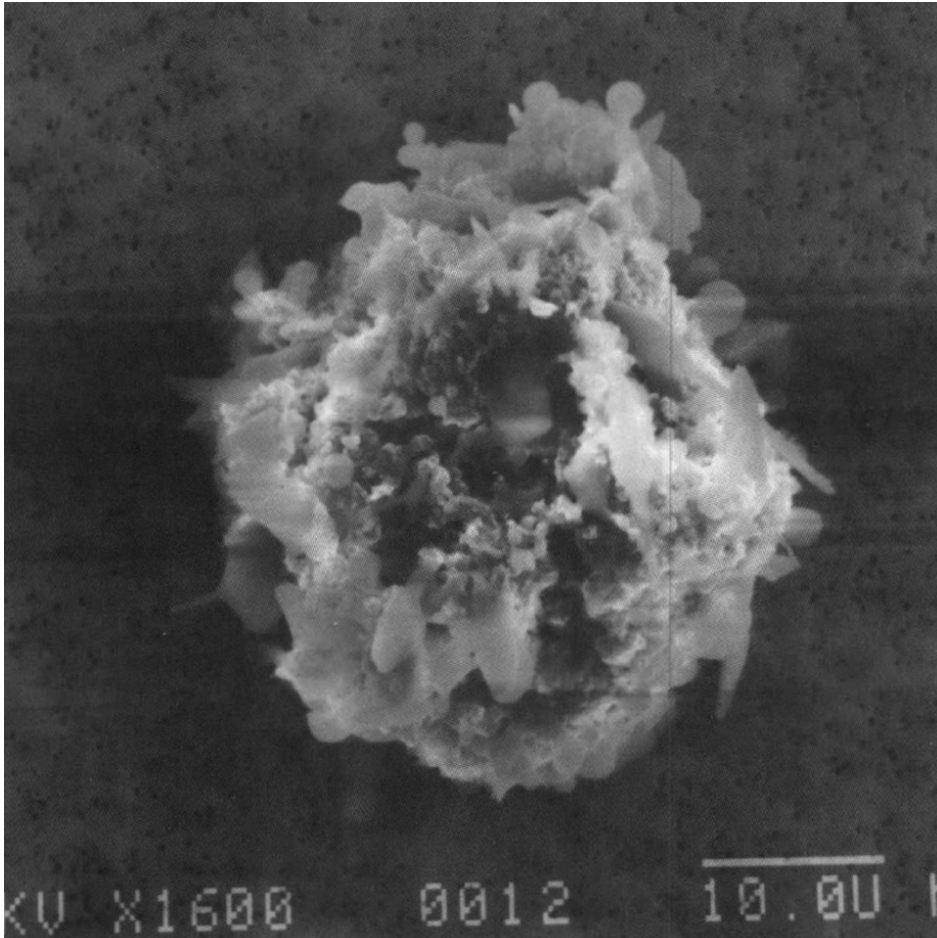
Series of traces of cosmic dust from NASA Stardust missions 1999-2006 and vacuum exposure on silk. The titles of the works are derived from NASA's classification.

Cinema:

3 SPECKS (2025)

2-screen video installation (duration 16 min), 3 tonnes of oven-dried quartz sand. The images of stardust in the video are from NASA's cosmic dust catalog as well as AI-generated images.





NASA Cosmic Dust Catalog vol. 14, particle L2008E5

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By Anne Haaning

Si (silicon)

Si (silicon) is generated inside massive stars through nuclear fusion. There it exists briefly in its pure form before either fusing into **Fe** (iron) inside the star's core or being ejected into space through a supernova explosion and eventually reacting with **O** (oxygen) to form **SiO₂** (silica).

Si (silicon) doesn't want to be pure. It wants to bond, bind, blend, transform... Were it not for its technological perfection in its pure form, silicon's intermolecular relationships here on Earth might've found themselves undisturbed.

Irresistible **C** (carbon) will take away **O₂** (oxygen) if the temperature is high enough (2000 degrees), leaving **Si** (silicon) unattached and available for semiconductor manufacture.

SiO₂ (silica)

I spent Christmas with **SiO₂** (silica). After it had been scattered through space by exploding supernovae some billion years or so ago. We convened on a beach on the island of Møn – it supported my weight in the form of quartz sand. But I'm no match for **O₂** (oxygen) or it was simply too cold. I made marks. We didn't bind.

If you make a gel from **SiO₂** (Silica) and replace the liquid with gas while keeping the structure intact, you get a substance called **aerogel** – famous for being the lightest of solid materials and excellent for catching stardust... or cocoa powder, which is what NASA used for testing theirs before sending it to space.

Traces

On the 15th of January 2006, a capsule containing aerogel-captured cometary and interstellar dust landed in a Utah desert. When it hit the ground, it bounced into the air while moving sideways. It spun and landed on its rim, then rolled across the desert. Later it was inspected as if it were a UFO before being

taken away, purged with pure nitrogen and escorted to a dedicated clean room at the Johnson Space Center.

Inside this vault are cocoa-calibrated cubes of aerogel pierced with swarms of cosmic dust. Calibrated to halt space-borne particles within approximately 1 mm of travel. Like nano-sized versions of projectile-impact simulations fine-tuning the trajectory of a bullet inside the anatomy of its kill.

These traces are of stardust. The image is of technology.

A trace becomes a stain becomes a trace. A precious piece of clothing, wearing the stain so that it emphasises the lack that made it. Not an art stain. Like thick layers of paint, clay or whatever matter has borne witness to some meaningful activity.

Some traces on silk are not made by technology. I tend to think of those as stains.

Tracer Object

2006 was also the year that Maxon released its Mograph module for Cinema4D – my 3D-program of choice. While I'm not especially familiar with the Tracer Object, a central feature of the module, I know that it can be 'used to create nice funky traces for your animated objects' (Athanasios 'Noseman Pozantzis'). If you'd like a complex spline (line) in a three-dimensional digital space and care little for its shape, **Tracer Object** would be an appropriate tool for the task. Making objects move in C4D is easy (making them move in ways that are intended is hard). Tracer Object harnesses this abundance of movement as a method for creating content that escapes the limitations of a duration. A drawing of a moving object. A visualisation of an automation. Or a diagram of C4D's tracer function – the Tracer Object itself.

As for my vacuum frame that squished and crinkled the silk during cyanotype exposure, it is also an object that adds its own traces, regardless of its subject. While I willed it into existence,

I now experience its distinct imprint as more diagrammatic – as a sum of its parts – than I anticipated. But is this imprint a diagram of the photographic process the vacuum frame performs?

And do NASA's traces of cosmic dust double as diagrams of their technological function?

Specks

NASA has been collecting cosmic dust since the 1980s. Initially from Earth's stratosphere in aeroplanes before the Stardust mission wrapped up the 20th century by going into space to get it.

Clicking through catalogues of cosmic dust – the actual specks, not the traces – the progression of specks is in the technologies that documented them. If I knew specks in unmediated form maybe I'd prefer the 1993 batch. Maybe I'd notice a change of character or identify the aging in them. But knowing 5 µm in unmediated form is a sneeze, an allergic reaction or a nutrient supplement.

Bio

Anne Haaning is a visual artist, researcher and teacher, and she is currently working on her practice-based Marie Curie postdoc *We Are Supernova* at Goldsmiths College in London. Haaning's primary medium is video installation, and in her practice, she is focused on exploring the possibilities and challenges of technology. She often uses computer graphics and animation combined with archival research to unfold these themes.

HEIRLOOM – center for art and archives is a non-profit arts organization in Copenhagen dedicated to exhibiting and initiating projects with a focus on the artistic archive. HEIRLOOM is concerned with exploring artistic legacy and overlooked collections in dialogue with contemporary art. The program pays special attention to ephemeral practices and discussions around gender, identity and transnational exchanges. It is Heirloom's ambition to revisit and contextualize art practices through new curatorial concepts and formats. The organization is physically located in Copenhagen but operates internationally.

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